## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

1. (Original) A compound of formula (I):

$$R^{6}S(O)_{n}$$
 $R^{4}$ 
 $N$ 
 $N$ 
 $N$ 
 $R^{7}$ 
 $R^{7}$ 

wherein:

 $R^1$  is CN, CSNH<sub>2</sub> or C(=N-Z)-S(O)<sub>r</sub>-Q;

Z is H,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_3-C_6)$ -alkenyl,  $(C_3-C_6)$ -alkynyl,  $-(CH_2)_qR^7$ ,  $COR^8$ ,  $CO_2-(C_1-C_6)$ -alkyl or  $S(O)_pR^8$ ;

Q is  $(C_1-C_6)$ -alkyl or  $CH_2R^7$ ;

W is C-halogen, C-CH<sub>3</sub> or N;

R<sup>2</sup> is hydrogen, halogen or CH<sub>3</sub>;

 $R^3$  is  $(C_1-C_3)$ -haloalkyl,  $(C_1-C_3)$ -haloalkoxy or  $SF_5$ ;

 $R^4$  is hydrogen,  $(C_2-C_6)$ -alkenyl,  $(C_2-C_6)$ -haloalkenyl,  $(C_2-C_6)$ -alkynyl,  $(C_2-C_6)$ -haloalkynyl,  $(C_3-C_7)$ -cycloalkyl,  $(C_3-C_7)$ -cycloalkyl- $(C_1-C_6)$ -alkyl,  $CO_2$ - $(C_1-C_6)$ -alkyl,  $CO_2$ - $(C_3-C_6)$ -alkenyl,  $CO_2$ - $(C_3-C_6)$ -alkynyl,  $CO_2$ - $(CH_2)_mR^7$  or  $SO_2R^8$ ; or  $(C_1-C_6)$ -alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkoxy,  $(C_1-C_6)$ -haloalkoxy,  $(C_3-C_6)$ -alkenyloxy,  $(C_3-C_6)$ -haloalkenyloxy,  $(C_3-C_6)$ -haloalkynyloxy,  $(C_3-C_7)$ -cycloalkyl,  $S(O)_pR^8$ , CN,  $NO_2$ , OH,  $COR^9$ ,  $NR^9R^{10}$ ,  $S(O)_pR^7$ ,  $OR^7$  and  $CO_2R^9$ ; A is  $(C_1-C_6)$ -alkylene or  $(C_1-C_6)$ -haloalkylene;

X is C(=O), C(=S) or  $SO_2$ ;

Y is O, NR<sup>11</sup> or a covalent bond;

 $R^5$  is  $(C_3-C_6)$ -alkenyl,  $(C_3-C_6)$ -haloalkenyl,  $(C_3-C_6)$ -alkynyl,  $(C_3-C_6)$ -haloalkynyl,  $(C_3-C_7)$ -cycloalkyl,  $(C_3-C_7)$ -cycloalkyl- $(C_1-C_6)$ -alkyl,  $-(CH_2)_qR^7$  or  $-(CH_2)_qR^{12}$ ; or is  $(C_1-C_6)$ -alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkoxy,  $(C_1-C_6)$ -haloalkoxy,  $(C_3-C_6)$ -alkenyloxy,  $(C_3-C_6)$ -haloalkenyloxy,  $(C_3-C_6)$ -haloalkynyloxy,  $(C_3-C_7)$ -cycloalkyl,  $S(O)_pR^8$ , CN,  $NO_2$ , OH,  $COR^9$ ,  $NR^9R^{10}$ ,  $S(O)_pR^7$ ,  $OR^7$  and  $CO_2R^9$ ;  $R^6$  is  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_2-C_6)$ -alkenyl,  $(C_2-C_6)$ -haloalkenyl,  $(C_2-C_6)$ -haloalkynyl;

 $R^7$  is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, (C<sub>1</sub>-C<sub>6</sub>)-haloalkoxy, CN, NO<sub>2</sub>, S(O)<sub>p</sub>R<sup>8</sup>, COR<sup>10</sup>, COR<sup>13</sup>, CONR<sup>9</sup>R<sup>10</sup>, SO<sub>2</sub>NR<sup>9</sup>R<sup>10</sup>, NR<sup>9</sup>R<sup>10</sup> and OH;

 $R^8$  is  $(C_1-C_6)$ -alkyl or  $(C_1-C_6)$ -haloalkyl;

 $R^9$  and  $R^{10}$  are each independently H,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_3-C_6)$ -alkenyl,  $(C_3-C_6)$ -haloalkenyl,  $(C_3-C_6)$ -alkynyl,  $(C_3-C_6)$ -cycloalkyl or  $-(C_1-C_6)$ -alkyl- $(C_3-C_6)$ -cycloalkyl; or

 $R^9$  and  $R^{10}$  together with the attached N atom form a five- or six-membered saturated ring which optionally contains an additional hetero atom in the ring which is selected from O, S and N, the ring being unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkyl and  $(C_1-C_6)$ -haloalkyl;  $R^{11}$  is H,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_3-C_6)$ -alkenyl or  $(C_3-C_6)$ -alkynyl;  $R^{12}$  is heterocyclyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_4)$ -alkyl,  $(C_1-C_4)$ -haloalkyl,  $(C_1-C_4)$ -alkoxy,  $(C_1-C_4)$ -haloalkoxy,  $(C_1-C_4)$ -haloalkoxy,  $(C_1-C_4)$ -alkyl,  $(C_$ 

 $R^{13}$  is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, (C<sub>1</sub>-C<sub>6</sub>)-haloalkoxy, CN, NO<sub>2</sub>, S(O)<sub>p</sub>R<sup>8</sup> and NR<sup>9</sup>R<sup>10</sup>;

n, p and r are each independently zero, one or two; m and q are each independently zero or one; and

each heterocyclyl in the above-mentioned radicals is independently a heterocyclic radical having 3 to 7 ring atoms and 1, 2 or 3 hetero atoms in the ring selected from the group consisting of N, O and S; or a pesticidally acceptable salt thereof.

- 2. (Original) A compound or a salt thereof as claimed in claim 1 wherein R<sup>1</sup> is CN or CSNH<sub>2</sub>.
- 3. (Currently Amended) A compound or a salt thereof as claimed in claim 1 er 2 wherein  $R^6$  is  $CF_3$ .
- 4. (Currently Amended) A compound or a salt thereof as claimed in claim 1, 2 or 3 wherein  $R^1$  is CN, CSNH<sub>2</sub> or C(=N-Z)-S-Q;

Z is H,  $(C_1-C_3)$ -alkyl,  $-(CH_2)_qR^7$ ,  $COR^8$ ,  $CO_2$ - $(C_1-C_3)$ -alkyl or  $S(O)_pR^8$ ;

Q is (C<sub>1</sub>-C<sub>3</sub>)-alkyl;

W is C-CI;

R<sup>2</sup> is CI;

R<sup>3</sup> is CF<sub>3</sub>:

 $R^4$  is hydrogen,  $(C_2-C_4)$ -alkenyl,  $(C_2-C_4)$ -alkynyl,  $(C_3-C_7)$ -cycloalkyl,  $CO_2$ - $(C_1-C_4)$ -alkyl,  $CO_2$ - $(C_3-C_4)$ -alkynyl,  $CO_2$ - $(C_4)$ -alkynyl,  $CO_2$ - $(CH_2)$ <sub>m</sub> $R^7$  or  $SO_2R^8$ ; or  $(C_1-C_3)$ -alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_3)$ -alkoxy, S(O)<sub>p</sub> $R^8$  and  $CO_2$ - $(C_1-C_3)$ -alkyl);

A is -CH<sub>2</sub>CH<sub>2</sub>- or -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-;

X is C(=0) or  $SO_2$ ;

Y is O, NH or a covalent bond;

 $R^5$  is  $(C_3-C_4)$ -alkenyl,  $(C_3-C_4)$ -alkynyl,  $-(CH_2)_qR^7$ ,  $(C_1-C_3)$ -alkyl or  $(C_1-C_3)$ -haloalkyl;  $R^6$  is  $CF_3$ ;

each  $R^7$  is independently phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_3)$ -alkyl,  $(C_1-C_3)$ -haloalkyl,  $(C_1-C_3)$ -alkoxy,  $(C_1-C_3)$ -haloalkoxy,  $(C_1-C_3)$ -haloalkoxy,  $(C_1-C_3)$ -haloalkyl or  $(C_1-C_3)$ -haloalkyl.

5. (Currently Amended) A compound or a salt thereof as claimed in any one of claims 1 to 4 claim 1 wherein R<sup>1</sup> is CN or CSNH<sub>2</sub>;

W is C-CI;

R<sup>2</sup> is CI;

R<sup>3</sup> is CF<sub>3</sub>;

R4 is (C1-C3)-alkyl;

A is -CH<sub>2</sub>CH<sub>2</sub>- or -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-;

X is C(=O);

Y is O, NH or a covalent bond;

 $R^5$  is  $(C_3-C_4)$ -alkenyl,  $(C_3-C_4)$ -alkynyl,  $-(CH_2)_qR^7$ ,  $(C_1-C_3)$ -alkyl or  $(C_1-C_3)$ -haloalkyl;  $R^6$  is  $CF_3$ ;

 $R^7$  is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_3)$ -alkyl,  $(C_1-C_3)$ -haloalkyl,  $(C_1-C_3)$ -alkoxy,  $(C_1-C_3)$ -haloalkoxy,  $(C_1-C_3)$ -alkyl or  $(C_1-C_3)$ -haloalkyl.

- 6. (Currently Amended) A process for the preparation of a compound of formula (I) or a salt thereof as defined in any one of claims 1 to 5 claim 1, which process comprises:
- a) where when R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, W, A and n are as defined in claim 1, R<sup>1</sup> is CN, and Y and X are as defined in claim 1 with the exclusion of compounds in which -Y-X- is -NH-CO- or -NH-CS-, acylating or sulfonylating a compound of formula (II):

$$R^{6}S(O)_{n}$$
 $R^{4}$ 
 $HO-A-N$ 
 $N$ 
 $R^{2}$ 
 $W$ 
 $R^{3}$ 
 $(II)$ 

wherein R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup>, W, A and n are as defined in formula (I), with a compound of formula (III):

$$R^5$$
—Y—X—L (III)

wherein Y and X are as defined in formula (I) with the exclusion of compounds in which -Y-X- is -NH-CO- or -NH-CS-, and L is a leaving group; or

b) where when R<sup>1</sup> is CN, and R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, W, A and n are as defined in claim 1, reacting a compound of formula (II) wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>6</sup>, W, A and n are as defined in claim 1 and -Y-X- is -NH-CO- or -NH-CS-, with an isocyanate or isothiocyanate compound of formula (IV) or (V):

$$R^5-N=C=O$$
 (IV)  $R^5-N=C=S$  (V)

wherein R<sup>5</sup> is as defined in formula(I); or

- c) where when R<sup>1</sup> is CN, n is 1 or 2, and R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, W, A, X and Y are as defined in claim 1, exidising oxidizing a corresponding compound in which n is 0 or 1; or
- d) where when R<sup>1</sup> is CSNH<sub>2</sub>, and R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, W, A, X, Y and n are as defined in claim 1, reacting the corresponding compound of formula (I) wherein R<sup>1</sup> is CN, with an alkali or alkaline earth metal hydrosulfide, or with the reagent Ph<sub>2</sub>PS<sub>2</sub>; or
- (e) where when R<sup>1</sup> is CSNH<sub>2</sub>, and R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, W, A, X, Y and n are as defined in claim 1, reacting the corresponding compound of formula (I) wherein R<sup>1</sup> is CN, with a bis(trialkylsilyl)sulfide, in the presence of a base; or
- (f) where when R<sup>1</sup> is C(=N-H)-S-Q, and Q, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, W, A, X, Y and n are as defined in claim 1, reacting the corresponding compound of formula (I) wherein R<sup>1</sup> is CSNH<sub>2</sub> with an alkylating agent of formula (VI) or (VII):

$$Q-L^1$$
 (VI)  $Q_3O^+BF_4^-$  (VII)

wherein Q is as defined in formula (I) and L1 is a leaving group; or

(g) where when R<sup>1</sup> is C(=N-Z)-S-Q, Z is as defined in claim 1 with the exclusion of H, and the other values are as defined in formula (I), alkylating, acylating or sulfonylating the corresponding compound of formula (I) wherein Z is H, with a compound of formula (VIII):

wherein Z is as defined in formula (I) with the exclusion of H, and  $L^2$  is a leaving group; and

- (h) if desired, converting a resulting compound of formula (I) into a pesticidally acceptable salt thereof.
- 7. (Currently Amended) A pesticidal composition comprising <u>a pesticidally effective amount of a compound of formula (I) or a pesticidally acceptable salt thereof as defined in <del>any one of claims 1 to 5 claim 1, in association with a pesticidally acceptable diluent or carrier and/or surface active agent.</del></u>
- 8.-9. (Cancelled)
- 10. (Currently Amended) A method for controlling pests at a locus which comprises applying thereto an to said locus a pesticidally effective amount of a compound of formula (I) or a salt thereof as claimed in any one of claims 1 to 5 or of a composition according to claim 7 claim 1.
- 11. (New) A method for controlling pests at a locus which comprises applying to said locus a pesticidally effective amount of a composition as claimed in claim 7.
- 12. (New) A veterinary medicament comprising a pesticidally effective amount of a compound of formula (I) or a salt thereof as claimed in claim 1, in association with a veterinarily acceptable diluent or carrier and/or surface active agent.
- 13. (New) A method for the control of pests in or on an animal which comprises administering to said animal a pesticidally effective amount of a compound of formula (I) or a salt thereof as claimed in claim 1.

- 14. (New) A method for the control of pests in or on an animal which comprises administering to said animal a pesticidally effective amount of a veterinary medicament as claimed in claim 12.
- 15. (New) A compound or a salt thereof as claimed in claim 2 wherein R<sup>6</sup> is CF<sub>3</sub>.
- 16. (New) A compound or salt thereof as claimed in claim 4, wherein R<sup>1</sup> is CN or CSNH<sub>2</sub>.
- 17. (New) A compound or a salt thereof as claimed in claim 1, wherein R<sup>1</sup> is CN, R<sup>4</sup> is CH<sub>3</sub>, R<sup>6</sup> is CF<sub>3</sub>, A is -CH<sub>2</sub>CH<sub>2</sub>-, W is C-Cl, R<sup>2</sup> is Cl and R<sup>3</sup> is CF<sub>3</sub>.
- 18. (New) The compound or salt thereof as claimed in claim 17, wherein:
- (a) X is C(=O), Y is O,  $R^5$  is CH<sub>3</sub> and n is 1;
- (b) X is C(=O), Y is O, R<sup>5</sup> is 4-nitrophenyl and n is 2;
- (c) X is C(=O), Y is a covalent bond, R<sup>5</sup> is CH<sub>3</sub> and n is 2;
- (d) X is C(=O), Y is a covalent bond, R<sup>5</sup> is CH<sub>2</sub>OCH<sub>3</sub> and n is 2;
- (e) X is C(=O), Y is a covalent bond, R<sup>5</sup> is 4-trifluoromethylphenyl and n is 2;
- (f) X is C(=O), Y is a covalent bond, R<sup>5</sup> is 2,6-difluorophenyl and n is 2;
- (g) X is C(=O), Y is a covalent bond, R<sup>5</sup> is 2-fluorophenyl and n is 2;
- (h) X is C(=O), Y is NH, R<sup>5</sup> is 4-ethoxyphenyl and n is 2;
- (i) X is C(=O), Y is NH, R<sup>5</sup> is 4-trifluoromethoxyphenyl and n is 2;
- (j) X is  $SO_2$ , Y is a covalent bond,  $R^5$  is propyl and n is 2;

- (k) X is SO<sub>2</sub>, Y is a covalent bond, R<sup>5</sup> is 4-chlorophenyl and n is 2; or
- (I)  $X ext{ is } SO_2$ , Y is a covalent bond,  $R^5$  is 4-methylphenyl and n is 2.